

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in this application:

Claim 1 (original): A method of displaying two images in registration with each other comprising the steps of comparing the two images to each other, calculating a transformation which maps features in one image to corresponding features in the other, displaying the two images in superimposition based on the transformation, and displaying a measure of the confidence in the registration.

Claim 2 (original): A method according to claim 1 wherein said measure of confidence is calculated from the degree of transformation required to perform said mapping.

Claim 3 (original): A method according to claim 2 wherein said measure of confidence is calculated from the degree of non-rigid deformation in said calculated transformation.

Claim 4 (currently amended): A method according to claim ~~2 or 3~~ wherein said measure is calculated excluding rigid motions.

Claim 5 (currently amended): A method according to claim ~~2, 3 or 4~~ wherein said measure of confidence is calculated from the magnitude of the local deformation in said transformation.

Claim 6 (currently amended): A method according to claim ~~2, 3, 4 or 5~~ wherein said measure of confidence is calculated from the local change of volume implied by the transformation

Claim 7 (currently amended): A method according to ~~any one of the preceding claims~~ claim 1 wherein the measure is selectively displayed in response to user input.

Claim 8 (currently amended): A method according to claim 1 ~~any one of the preceding claims~~ wherein the confidence measure is displayed overlaid on the two images.

Claim 9 (currently amended): A method according to claim 1 ~~any one of the preceding claims~~ wherein the measure is displayed as a visually distinguishable overlay on the two images, the visual properties of the overlay at any point being based on the said measure.

Claim 10 (original): A method according to claim 9 wherein the colour of the visually distinguishable overlay is varied in dependence on said measure.

Claim 11 (currently amended): A method according to claim 9 ~~or 10~~ wherein the intensity of the visually distinguishable overlay is varied in dependence on said measure.

Claim 12 (original): A method according to claim 9 wherein the grey-level of the visually distinguishable overlay is varied in dependence on said measure.

Claim 13 (original): A method according to claim 8 wherein the confidence measure is displayed next to the displayed superimposed images.

Claim 14 (currently amended): A method according to claim 8, ~~9, or 13~~, wherein the visually distinguishable overlay comprises a symbol having a property which depends on the value of said measure at a selected display point.

Claim 15 (original): A method according to claim 14 wherein the symbol is one of a circle and an error bar whose size depends on the value of said measure at a selected display point.

Claim 16 (currently amended): A method according to claim 14 ~~or 15~~ wherein the symbol is displayed at any time only at a single selected display point.

Claim 17 (currently amended): A method according to claim 1 ~~any one of the preceding claims~~ wherein the images are medical images.

Claim 18 (currently amended): A computer program comprising program code means for executing on a programmed computer the method of claim 1 ~~any one of the preceding claims~~.

Claim 19 (original): A computer-readable storage medium encoding a computer program in accordance with claim 18.

Claim 20 (currently amended): An image display apparatus comprising a display, and an image processor adapted to perform the method of claim 1 ~~any one of claims 1 to 17~~.